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ABSTRACT

The National Center for Research on Evaluation, Standards, and Student Testing (CRESST) has been laying the groundwork to explore fundamental questions of the implementation of alternative assessment. The CRESST has been working collaboratively with school practitioners to help them implement performance assessment strategies so that the CRESST could better understand the implementation process and investigate barriers and facilitators to assessment innovation. CRESST methods are described, findings are discussed, and some examples are presented of the performance assessment materials developed by study participants. At a variety of sites, alternative assessment was studied in social studies, the humanities, and mathematics. A generic survey (15 teachers and administrators from 3 schools) and a specialized survey (11 teachers in a portfolio project and 7 teachers in a journal project) provided data about the implementation of performance assessment. Conclusions about barriers and facilitators of implementation are summarized. Overall, teachers and administrators saw positive effects from alternative assessment. Four appendixes contain two teacher surveys, a summary of impact and implementation findings, and four examples of alternative assessments. Four figures illustrate survey findings. (SLD)

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National Center for Research on
Evaluation, Standards, and Student Testing

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Project 3.3: Alternative Assessments
in Classroom Practice

Issues in Innovative Assessment for Classroom Practice: Barriers and Facilitators

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ISSUES IN INNOVATIVE ASSESSMENT FOR CLASSROOM PRACTICE: BARRIERS AND FACILITATORS

Pamela R. Aschbacher

Introduction

There has been an explosion of interest in performance assessment over the past several years and high hopes for its usefulness as a crucial instrument of school reform, but we have little evidence of what happens after such assessments are actually implemented. What are the consequences for teaching and learning when performance assessments become a routine part of the classroom? Clearly, this must be a primary concern when judging the worth of performance assessment (Linn, Baker, & Dunbar, 1991).

Before we can answer the question of consequences, however, we must address the issue of how to successfully *implement* new assessments in classrooms, schools, and districts, for we cannot assume that new approaches to assessment along with their implications for changes in teaching and curriculum will be immediately understood and embraced by practitioners. Nuttall and McLean's (1992) account of British teachers' reaction to the 1991 national trials of elementary school performance assessments suggests some of the problems that lie ahead in this country. Researchers here have also begun to note some of the problems in trying to develop and use performance assessments, such as the relative lack of assessment literacy among educators (Stiggins, 1991; Stiggins et al., 1992) and the need for extensive teacher training in order to implement alternative assessments (Aschbacher, 1991b; Aschbacher, 1992; Brewer, 1991; Myers, Treisman, & Wolf, 1992; Plake, Impara, Kapinus, & Kruglanski, 1992). Some have suggested that the implementation of performance assessments (along with revised curriculum and instruction) demands new roles for teachers and students and requires a radical paradigm shift among educators, from a focus on content coverage to one on outcomes achieved (Aschbacher, 1991a; Aschbacher, 1992; Moon, 1992). The beliefs, knowledge, and perceptions of educators as well as the structure of schooling also will be factors, as these strongly affect the implementation of reforms (Richardson, 1990; Sarason, 1982). If we hope to bring new forms of

assessment and instruction into schools, we need a much better understanding of schools' and educators' responses (and resistance) to new assessments. We need to identify the development and implementation strategies most likely to help teachers alter their conceptions and beliefs about assessment.

Over the past two years the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) has been laying the groundwork to explore fundamental questions of assessment implementation. We have been working collaboratively with school practitioners in a variety of school contexts to help them implement performance assessment strategies so that we could better understand the implementation process and could investigate the barriers and facilitators to assessment innovation that are likely to be encountered. This report briefly describes our methods, discusses our findings, and presents examples of the performance assessment materials developed by participants in this study.

Method

Approach

This project has taken an action research approach, integrating research and practice in alternative assessment by working together with selected teachers, schools, districts, and state departments of education to help them develop alternative assessments and then observing issues of implementation and impact.

Our involvement over the past two years has consisted primarily of providing practitioners with the following training and assistance:

- the rationale for alternative assessment;
- theories of learning and instruction that underlie new assessment and instructional approaches;
- alternative assessment models and materials developed at CRESST and elsewhere (cf. Baker, Aschbacher, Niemi, Yamaguchi, & Ni, 1991); and
- a process for developing performance assessments (Herman, Aschbacher, & Winters, 1992).

To study implementation of new assessments we relied on observation, interviews, and surveys of participants. We also collected some assessment-related materials developed by participants in this study, and they are included in the appendix to this report.

Study Sites

Several sites were involved in the study this year and last. Half were interested in math assessment, and half in social studies assessment. The sites included:

1. a large, urban, racially and socioeconomically diverse unified school district where the district office sought our assistance in working with a small group of teachers to pilot alternative assessment strategies for classroom use;

2. a group of teachers from a special secondary program focusing on interdisciplinary humanities serving a culturally diverse, large urban school district. These teachers attended a series of portfolio assessment workshops as part of a project to use portfolios for classroom assessment and program evaluation purposes;

3. two middle-sized, suburban, unified school districts (one serving a relatively high socioeconomic status (SES) community; one serving relatively low SES students, many of whom have limited proficiency in English) where the county office sought our assistance in helping teachers and administrators to develop alternative assessment strategies for both classroom and district use;

4. a culturally diverse elementary school not bound by state education policies, whose mandate includes participation in educational research projects. The administration and faculty of this school jointly decided to develop with us an assessment model as a precursor to an eventual schoolwide alternative assessment program; and

5. an innovative elementary classroom serving disadvantaged children from diverse cultural and language backgrounds. The teacher of this classroom has been developing and implementing alternative assessments for the past several years.

Alternative Assessment in Social Studies

The first two sites listed above were interested in developing social studies assessments. The district we worked with was interested in developing classroom assessments that eventually could inform districtwide assessment practices. The special interdisciplinary humanities program was interested

in assessments that could serve both classroom assessment and program evaluation needs. Each of these is described below.

District social studies assessment. CRESST staff conducted a week-long workshop during the summer of 1991 for 11 secondary social studies teachers from three districts: two large urban, and one suburban. The workshop was held at UCLA under the auspices of CRESST's Project 2.2. The training consisted of an introduction to the value and use of alternative assessment and the CRESST model for assessing content area understanding (in social studies and science) by examining students' expository essays (Baker et al., 1991). In addition, training was provided in instructional methods based on a generative model of student learning (Wittrock, 1991) as an appropriate instructional precursor to performance assessment. This approach is based on cognitive research showing that students must elaborate and question new information and link it to prior knowledge in order to be able to use it generatively to interpret new situations and solve problems.

Teachers in the CRESST summer training institute worked in teams to develop instructional plans, based on cognitive learning theory, to accompany alternative assessment of students using CRESST's model materials in secondary social studies. Teachers implemented these instructional plans together with the CRESST assessment materials during the 1991-92 academic year. They also attended several additional meetings and workshops that included training in how to use the CRESST rubric to score student social studies essays.

The workshops laid the foundation to enable teachers in the field to adapt the CRESST assessment model to other instructional goals in their secondary social studies classes. We anticipate that in the future they may use the model by extending the research and/or writing aspects of the task, by using it to assess group-produced projects, or by creating new assessment tasks in other social studies topic areas. Some of the materials they developed as instructional precursors to the CRESST assessment are appended to this report.

Program assessment in humanities. Over the past two years, staff from CRESST and the Center for the Study of Evaluation (CSE) have conducted nine workshops on portfolio assessment or related topics for teachers in a special

interdisciplinary program in a large urban district. We worked with teachers to articulate program goals, to determine core contents of portfolios for program evaluation and classroom assessment purposes, and to develop and apply scoring rubrics for judging student work and the quality of class assignments. Participating teachers used portfolios with their classes during the past two years and submitted a sample of portfolios and assignments to us at the end of each school year for rating and study. In additional to enabling teachers in the field to try out, adapt, and share a classroom portfolio assessment process with their colleagues, the project also provided data about program outcomes and about the strengths and weaknesses of program implementation. Specifications of portfolio contents and criteria are in the appendix.

Alternative Assessment in Math

There were four sites of study for performance assessment in math: a schoolwide reform effort; an individual, innovative, inner-city classroom; and two small, districtwide reform efforts. Each is described below.

Schoolwide reform. The faculty and administrators of an innovative, experimental school were interested in improving the assessment and reporting practices at the school. They wanted to develop a consistent and coherent system of assessment, across all grade levels in all key curriculum areas, that would utilize a variety of assessment methods and could be communicated readily to students, parents, and other schools. They held several meetings with CRESST staff to discuss possible approaches to the development and use of alternative assessments at the school. Our first plan was to help them develop portfolios and journals in two content areas, science and math, and in the process to develop model alternative assessment strategies that could be adapted to other content areas in future. After much discussion, however, and for several reasons, they chose to narrow the focus to math alone and decided to work solely on journals. A number of the teachers already were using journals as part of their class activities but did not use them for assessment purposes, and they were interested in exploring their measurement value. They also felt that working on only one new assessment method in one subject area would minimize logistical and other implementation barriers and would allow them to focus more squarely on

assessment. The entire school was emphasizing math this past year, so that was a natural choice of subject area for the project, and the faculty was intrigued by the idea of using journals in math. Furthermore, journals may be viewed as a sort of subset or special case of the portfolio concept. Focusing on journals this past year thus allowed teachers to deal with many portfolio-related issues, preparatory to a subsequent and now current math portfolio project funded by NSF at that site.

At additional meetings this past year, CRESST staff joined the school faculty and administrators to discuss potential effects of keeping math journals on both teachers and students, such as those noted by Borasi and Rose (1989), to examine teachers' existing practices with regard to journals, and to reach consensus on a definition of "journal" for this project. Teachers wanted journals to be defined in as broad and inclusive a way as possible in an attempt to be fair to all students and to let teachers experiment with a variety of ways to use them. Journal, in this project, meant a personal, bound notebook in which students wrote down *something* related to math about once a week. The content of student journals varied from teacher to teacher and grade to grade: class notes on the teacher's lecture, problem statements, solutions, explanations of their understandings of certain math concepts, records of important information the student might want to remember such as a vocabulary list, reflections on class discussions or assignments, and self-evaluations of their math knowledge and skills. Teachers agreed to read these journals and occasionally comment on them.

CRESST staff also tried to work with the faculty to articulate student outcomes or characteristics to be assessed in journals and to try to outline appropriate journal content to ensure the journals would yield intended measurements. Teachers were quite interested in metacognitive outcomes (such as awareness of a process, self-evaluation) and affective outcomes (such as confidence about math skills) as well as cognitive ones (such as vocabulary, conceptual comprehension, problem-solving strategies). However, teachers did not want to specify journal content or intended outcomes before allowing all the teachers to explore for several months how they might use journals in their classes. During the year students in lower, middle, and upper elementary grade levels kept math journals. The teachers kept notes of how students were using the journals and what they themselves were learning

The training we provided covered an introduction to the value and appropriate use of alternative assessment, background in cognitive learning theory supporting innovative instruction and assessment, a systematic approach to developing performance assessments, and examples of alternative assessments. Participants worked in collaborative groups to articulate student outcomes, create tasks that would allow students to reveal their progress towards those outcomes, and create criteria to judge the quality of student work. They developed prototype alternative measures and piloted them in their district classrooms. Two follow-up workshops this past year helped participants refine and expand their measures. Examples of their materials are appended to this report.

Data Collection

To collect data on the implementation of alternative assessments, we relied on a combination of surveys, interviews, and observations during the workshops and meetings in the six study sites described above. We were able to use a generic survey with three sites (15 teachers and administrators from three schools, each in a different district) and a specialized survey with two sites (11 teachers in a portfolio project across six schools, and 7 teachers in a journal project at one school). (Copies of the surveys are appended to this report.) At all sites we conducted interviews on performance assessment and informally observed collegial interaction at meetings.

Results

What Were the Barriers Teachers and Administrators Faced in Developing and Implementing Alternative Assessments?

Emphasis on learning activities rather than outcomes. Probably the most fundamental barrier to developing and implementing performance assessments that we observed was the pervasive tendency of teachers to focus on classroom activities rather than student outcomes. The faculty at the innovative elementary school in our study is more used to incorporating innovations than most, yet they appeared very uncomfortable when asked to move beyond using student journals as a classroom learning activity to the

about students and journaling in the process. In general, they seemed to feel journals gave them certain insights into students' thinking and feelings and that some students (primarily those who had little trouble writing) liked the journals and derived insights themselves. A couple of meetings were canceled during the time in which we had planned to work with teachers on specifying standard journal contents and criteria, and the year ended before the teachers could create these specifications.

Inner-city classroom. One teacher-researcher, at a culturally diverse elementary school in the LAUSD, met with us several times to discuss her philosophy and methods of assessment and instruction, and we observed her classroom. She uses math journals with her students as well as observations, performances, demonstrations, and other informal classroom performance assessments. Her class is a particularly rich and unusual setting in which to study the implementation and impact of alternative assessment. She is a very dedicated and innovative teacher who has been developing and refining alternative methods on her own over the past several years and did not need assistance from us to implement alternative assessments. She has had most of the same students in a multi-age class for three years, thus eliminating some of the difficulties of assessment that arise from lack of background knowledge about individual children. In addition, her students are primarily from lower SES, minority backgrounds; a number have limited proficiency in English and some have special education needs. An example of her student math journal entries is in the appendix. She felt a strong sense of direction and did not seek our assistance in developing or revising her assessments.

Districtwide reform efforts. The County Superintendent of Schools in a large, nearby county was eager to support the existing interest in alternative assessment among the districts in his area. CRESST staff agreed to conduct a three-day workshop during the summer of 1991 for representatives from seven districts interested in developing alternative assessments. Two districts that attended the workshops were very interested in developing districtwide alternative assessments in math, particularly open-ended questions. Both districts already had committees of administrators and teachers exploring the development of new assessments, but both felt the need for additional technical assistance.

point of using journals with some rigor to provide assessment information. They were able to brainstorm their general goals for students, but they were reluctant to articulate specific student outcomes to be measured. In fact, they spent most of the year "trying out" math journals in their classrooms and documenting how journals were useful to them. They effectively procrastinated specifying measurable outcomes, even though half of them had previously used journals as classroom activities. Even for this innovative school, the faculty found it easier and more comfortable to focus on learning activities rather than learning outcomes.

Teachers we studied who used portfolios exhibited much the same inclination, focusing on what interesting activities might be documented in the portfolios rather than what goals would be achieved as a result of these instructional activities. When pushed, they could brainstorm outcomes in general categories, such as "effort" or "use of important concepts and principles," but they seemed to feel out of their depth when asked to expand on these outcomes.

The same phenomenon was observed in nearly every site we studied. For example, teachers and administrators from the seven districts attending our summer institute on performance assessment all had a difficult time articulating desired cognitive outcomes and tended to think in terms of what activities they wanted students to engage in (such as using math manipulatives). When asked to share their assessments, they tended to describe the tasks, omitting mention of intended student goals.

It is relatively straightforward for a teacher to think in terms of what curriculum to cover and what activities to provide. Planning activities is a very concrete task with which teachers have had practice, and a teacher can shape or control these tasks fairly easily. It is both more difficult and daunting for teachers to work towards having students achieve specific goals because outcomes can be affected by many variables in a student's life outside the control of the teacher (such as the student's home life).

Understandably, teachers and administrators are more comfortable when they are held accountable for simply covering important curriculum content rather than for improving student achievement, particularly in terms of external targets such as the SAT and AP exams. The vagaries of a typical

school day in a large urban district (absences, assemblies, unscheduled meetings or assemblies, visitors, student fights, drug arrests, and so forth) provide ample challenge to merely covering the content. In addition, many teachers acknowledged their own lack of assessment literacy, perhaps due in part to the widespread use and value placed on traditional accountability measures, usually standardized, multiple-choice exams crafted by external "testing experts."

Difficulties specifying criteria for judging student work. The nature of performance assessment requires that teachers and administrators articulate the criteria by which student work will be judged, but many practitioners in our study were not comfortable with judging in a rigorous manner or with being held accountable for those judgments.

In most of the sites we studied, teachers were expected to develop criteria for judging student work and seemed distinctly uncomfortable and reluctant to do so. In workshops and meetings they tended to spend time discussing student activities rather than the criteria for judging student performance. For example, the teachers in this study who were using portfolios sought to avoid being specific about criteria for judging student work and expressed uncertainty over how to grade students. Teachers involved in developing open-ended math assessments took several months to think through how to judge student work.

The classroom teacher in our study who works alone on alternative assessment and one teacher in the humanities portfolio project stand out as rare examples of the kind of teacher who is comfortable with intense reflection, deep conceptual involvement, and a focus on complex student outcomes rather than simple content coverage. Even these teachers, however, have criteria for judging students that are so internalized that they find it hard to articulate their criteria formally and would require some technical assistance to do so.

Assessment anxiety. Another basic barrier in the development and implementation of alternative assessments, and one closely related to difficulties in articulating outcomes and criteria, is best characterized as "assessment anxiety." Assessment implies judging and being judged, the consequences of which are intimidating for both teachers and students, so many teachers seek to avoid it. Teachers in several of our sites mentioned not

having resolved what factors to take into account in grading and how to balance them, including achievement, effort, talent, student background and context. They are well aware that grading has consequences for students and implications for themselves professionally. Many of the teachers in the portfolio project, for example, preferred not to give the portfolios a grade, even though they had to give each student a course grade and presumably the portfolios reflected the work in the course. Several mentioned that they did not want to penalize students for the teacher's own inexperience with the portfolio process. Many teachers also expressed discomfort with being judged themselves by their students' performance. Those in the portfolio group tended to send us portfolios from their better students despite a request for a sample from the full range of students in the class, and they seemed a little worried that skimpy portfolios might reflect badly on their teaching. They were quick to tell us that they had done much that did not show up in the portfolios.

Teachers also discussed shaving or embroidering grades at times in an attempt to motivate students, and their decision rules appeared somewhat idiosyncratic. For example, one teacher might give higher than deserved grades at the beginning of the year to avoid discouraging students; other teachers might give lower than deserved grades to get students' attention, set a high standard, and encourage them to exert more effort. Some teachers felt uncomfortable about being viewed as inconsistent in their grading, which portfolios might reveal.

Lack of time. Few teachers or administrators themselves articulated the three barriers discussed above: reluctance to focus on outcomes, difficulties specifying criteria, and assessment anxiety. These were barriers that we observed. However, there was strong consensus across the teachers in all the sites we studied that lack of time (and money to pay for that time) is a *very* critical barrier to developing and implementing new assessments. Teachers and administrators cited the need for time in many areas: to learn about and grow comfortable with new assessments, to develop or review and select them, to use them in the classroom, to be trained to rate student work, to do the scoring, and to synthesize the results of more complex assessments to make instructional and program decisions. Many practitioners already feel challenged by other innovations in school reform and by the need to do more

with larger classes and fewer resources than in the past. They do not want assessments that are even more complex, elaborate, and time-consuming than what currently exists. Unfortunately, almost any new assessment strategy will appear complicated in the beginning and thus meet with resistance.

We knew going into this study that helping teachers and administrators develop new assessments would take time. We were not prepared for *how much* time and support it would take! Overcoming the uncertainties and fears mentioned above and acquiring new knowledge not only about assessment but about learning and instructional theory as well seemed to take an inordinate amount of time—for the most part, more than we could provide for this study and more than the individuals and institutions had expected or budgeted themselves. Educators seemed to need lots of time to absorb and become familiar with the new ideas and vocabulary, time to decide on priorities, and time to reach consensus. Had we assumed a more directive stance, in which we simply told teachers what to adopt, we might have saved some time. However, we believe that the positive consequences of alternative assessments derive in large part from teachers' participating in the *process* of articulating and reaching consensus on valued student outcomes and criteria for judging success, not simply from adopting a list of outcomes and criteria provided wholecloth by others. Developing and implementing alternative assessments provides the opportunity for practitioners to engage in the most fundamental discussions of what they are trying to accomplish and how they will know when they have succeeded. According to those we interviewed in this study, this opportunity is sadly rare in schools today. They said that staff meetings and inservice training seldom focus on fundamental issues of purpose, and that teachers have little time or opportunity to discuss such topics with their colleagues in a meaningful way. The fragmentation of their day and the pressure of paperwork, particularly for secondary level teachers, who may work with 150 students a day, serve to focus their efforts on simply surviving day by day.

Need for training and ongoing support. Closely tied to the issue of time is the need for training on how to develop and implement alternative assessments in the schools. Teachers and administrators in our study agreed that training in new approaches to assessment is very important, and that they wanted more than was readily available to them. What surprised us,

however, was just how *much* information, practice, models, feedback, and encouragement were actually needed to help teachers grasp the notion of some new assessments, such as portfolios, and attempt to use them in their classes. Teachers who tried math journals and those who tried humanities portfolios seemed to need *months* to mull over the concept of journal or portfolio, and then more time to see how to use them for assessment purposes. It seems to take two or more years of trying to use portfolios before most teachers feel comfortable with them. The longer the acculturation period, the more training, monitoring, and feedback are needed to sustain teachers' interest and focus. Workshops spaced a few months apart were not judged sufficient. Continuous attention to implementation is necessary, in part because there are so many other concerns competing for teachers' attention and energy, and in part because, as Hall and Loucks (1981) noted, there are so many stages of the implementation process through which teachers must pass.

Also daunting was the realization that practitioners need extensive professional development not only in assessment methods per se but also in basic cognitive learning theory and its implications for instruction. Most practitioners have had little training in assessment or theories of learning and instruction to begin with, so new ideas do require significant time for mulling over and making the connections to what they already understand about students, teaching and assessment. One of the teachers in our study enumerated several areas in which she felt teachers need training in order to implement performance-based assessments successfully: innovative curriculum, instructional strategies, current cognitive learning theory, human development, assessment, scientific method (to be used by teachers as researchers in their own schools), school organization models, peer evaluation, and knowledge of student language and cultures.

Reluctance to change. This human characteristic was mentioned by several of the participants in this study as a significant barrier to implementing new assessments. What did they fear? One administrator mentioned that too much pressure from administrators might kill teacher interest in alternative assessments. On the other hand, several teachers mentioned that their administrators had not bought into the new assessments yet, and implied that they were not about to invest themselves in it too deeply as long as they lacked administrative support. Another teacher cited parent

pressure for old methods. Others said there was too much happening at once. Their method of dealing with such overload was to wait it out. If an innovation were worthwhile, it would be there for awhile and they would have later chances to try it out. Several teachers, particularly those at the secondary level, were reluctant to try new approaches that students might reject. At least one administrator mentioned his reluctance to impose a "revolution" on a faculty that might resist, favoring instead a slower "evolution" of assessment methods (one of the faulty maps of change noted by Fullan & Miles, 1992). Several people suggested that in the face of such concerns it was easier to rely on old, well-known techniques than to try new approaches.

Lack of a long-range implementation plan. A savvy administrator in our study pointed out the desirability of having a long-range development and implementation plan, but said that few districts developed such plans due to a variety of factors, such as not knowing how big an assessment reform project would become, dealing with competing urgent problems that absorb time for planning ahead, and lack of readily available implementation models for alternative assessments. As one person put it, "As we start out tweaking this one little thing—alternative assessment—we find ourselves face-to-face with big-time school reform."

During a transition from the familiar to new ways of assessing and teaching students, educators normally need to assess the change for its genuine possibilities and possible consequences for their own self-interest, confront the loss of the familiar and embrace the new, unlearn old beliefs and behaviors and learn new ones, move from anxiousness and uncertainty to stabilization and coherence (Fullan & Miles, 1992). A plan for dealing with this very long process, coupled with support throughout, is critical to successful reform.

What Factors Facilitated the Development and Implementation of Alternative Assessments?

Purposeful passion. Strong commitment among practitioners is clearly one of the most important factors that facilitates the implementation of new assessment approaches. Teachers committed to performance assessment are more likely to sustain their interest throughout a long change process, to incorporate it into their own classroom practices, to inspire students and other

teachers to be involved in new assessments, and to sustain their efforts if faced with an unsupportive environment.

In the portfolio project for example, there were some teachers who were only somewhat interested in portfolio assessment, but a few were quite passionate about the value of portfolios. While the former group did participate in the project, their use of portfolios appeared tangential to their teaching and assessment—almost an afterthought. A couple of them, in fact, scrambled to collect student work at the end of the year to create the portfolios after the fact. On the other hand, the passionate teachers embraced the portfolio process as a focal point of their instruction and assessment, and their students' portfolios revealed greater student and teacher involvement in this approach. Their portfolios tended to be richer compilations of work, showed more evidence of student consideration of what work was placed in the portfolios, and contained more elaborate and thoughtful student reflections on their work.

The school task force in this study that explored journals as an alternative assessment approach in mathematics seemed to value highly their period of exploration and innovation. Although they were not passionate about journals as an assessment strategy, they were committed to exploring new ideas that might improve instruction, and this commitment brought them to numerous meetings throughout the year.

An example of passionate commitment sustaining innovation is the elementary classroom teacher who participated in this study. She has been using alternative assessments, such as classroom observations, individual demonstrations of competence, interviews, and portfolios with her students for several years. She considers herself a teacher-researcher and devotes much time to videotaping her students' performances and to broad reading that will inform her practice. She is a willing colleague, enthusiastic about sharing her ideas. Yet few other teachers in her school share her sense of mission or have adopted her methods. She is a lone pocket of innovation, sustained primarily by her own passion and to a lesser extent by an informal network of like-minded colleagues outside her school.

Being part of a group. Participants in our study expressed strong consensus that having a group with whom to meet and share ideas was a critical facilitator to successful assessment innovations. As one person put it,

the success of their new assessment project was due to "the interest and involvement of several very bright teachers working together." Like people facing the need to exercise, they were more likely to attend the workshops, try new approaches in their classrooms, and refine their ideas if they had a "support" group to hear their concerns, reassure them they were "doing okay," remind them of group expectations, provide new ideas when needed, and sustain their commitment to the group goal.

A difficult problem with groups, however, is finding time (and the funding for that time) to meet often enough to provide the information and support needed. Teachers are very reluctant to leave their classes in the hands of substitutes while they attend workshops and meetings. On the other hand, they are reluctant to meet too often outside school hours. They are tired by 3 or 4 p.m. and want to go home. They may even face grading 150 essays that evening after a meeting. The need to cope with immediate demands often outweighs what they perceive as the low probability of payoff from attending a workshop or meeting about something new.

In the portfolio project studied here, for example, teachers were offered three workshops within a seven-month period, but that was not sufficient to support many of the teachers who began the project. About half those who began did not complete the project. Of those who did complete the project, half did not attend one or two of the three workshops because of lack of time and other commitments. Still, they said that knowing they were part of a group was motivating to these teachers and helped them maintain a sense of commitment even though some of them did not attend all the meetings.

Despite the successful innovation of the elementary school teacher in this study who worked alone on assessment, most teachers said they appreciated having at least one colleague at their school as a partner in their innovations, someone with whom they could share ideas and concerns on a frequent basis. Trying new approaches with a partner was perceived as "more fun" and "less threatening" than going it alone. Even the elementary teacher mentioned above expressed the wish that some of her colleagues were willing to share in her enthusiasm and ideas.

Districts that sent groups to our workshops appreciated the dual opportunity to have focused planning time together as a group along with time

to share their ideas with other groups. One person pointed out the importance in this situation of having districts that are willing to send multi-person teams and to sustain the commitment to attend and share so that all groups participate fully.

Administrative support. In several of the sites in this study, the driving force behind the implementation of new assessments was a strongly committed district office that was willing to find funding for teachers' professional development over a sustained period of time, to look beyond the district itself to find the necessary expertise, and to set up task forces to carry out the major development tasks. The two districts where teachers and administrators worked side-by-side at the professional development workshops appeared to sustain considerable commitment and excitement and, we suspect, will be more likely than most to effect real change at the classroom level in the future. The elementary teacher in this study who innovates "alone" in her school said that she gains support from the strong teachers' union in her district rather than from her principal or district office, and that turf wars between principals and teachers are a strong impediment to innovation.

One teacher mentioned the need for administrative support in the face of low parental support:

> Many parents want what they had in school: rote memory and standardized tests. We need a united voice for what this school provides and why.

Sustained technical assistance. Commitment, group sharing, and administrative support, though necessary, are not sufficient to successful implementation of new assessments. Practitioners also need sustained access to technical expertise to make good ideas succeed as *assessment*, not merely as interesting learning activities, as noted above. One administrator commented that our workshops had significantly helped clarify the reliability and validity issues associated with performance assessment, such as consistency of teacher scoring. He said that this was a critical feature since it affected the credibility of the innovations being considered by his district. Another administrator noted the leadership provided by the California Assessment Program and the technical assistance provided by the California Content Area Projects.

The technical assistance we provided to the districts in this study consisted of several workshops totaling about 30 hours over the space of a year (one 3-day summer institute and two 1-day follow-up workshops). At one elementary school, we participated in about 10 hours of meetings with teachers and administrators over several months. With the portfolio project, we provided about 6 hours of workshops in seven months, with optional additional presentations which some teachers attended. Such assistance was clearly necessary to help practitioners get their ideas off the ground, but it was definitely not sufficient for sustained and widespread change in assessment practices. The district that seemed to achieve the most progress during our training had already been working on their assessment innovations for several years and had gathered resources from various sources.

In a survey of some of the participants of this study, most respondents said they had received relatively strong support for the changes they were making in curriculum, instruction and assessment in two areas: access to materials, and encouragement from teachers, principals, and the district (average ratings on a 1–5 scale were about 3.8 to 4.0). However, only about half felt they had received much technical assistance (average rating was 3.4, on a 5-point scale). This rating suggests they felt they needed more assistance to accomplish their goals. They agreed unanimously that teachers need all of the following if they are to develop and implement new assessments successfully (listed in order of importance, with highest-rated first):

- administrative support for innovation;
- time to plan and carry out new instruction and assessments;
- training in curriculum, instruction, and assessment;
- materials (such as sample assessments used elsewhere);
- technical assistance.

What Was the Apparent Impact of Working on Alternative Assessment?

Educators' overall attitudes. Two-thirds of the survey respondents reported that working on alternative assessments had changed their thinking about their own teaching or administrative practices, their own assessment practices, and alternative assessment in general, as illustrated in Figure 1.

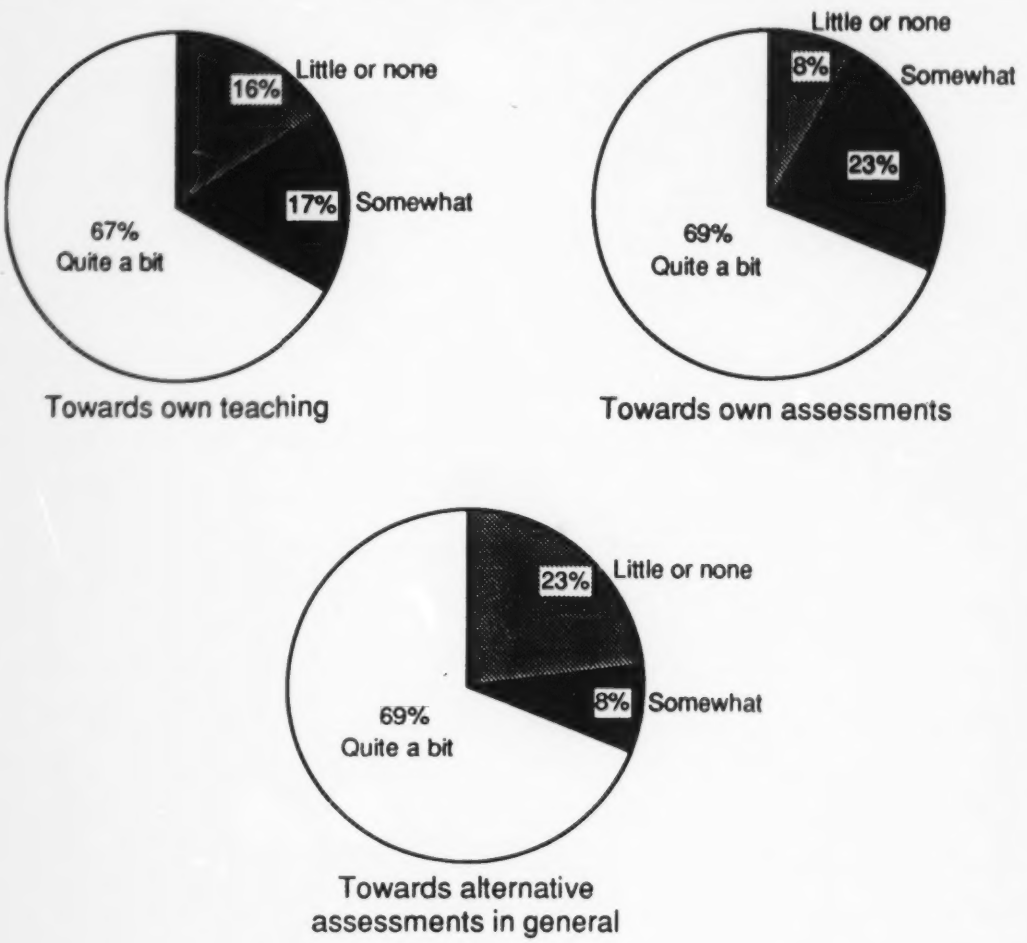

Figure 1. Impact of working on alternative assessment on educators' attitudes. Survey responses to items on 5-point scale: Quite a bit = 4 or 5; Somewhat = 3; Little or none = 1 or 2.

For example, one administrator who also teaches a teacher preparation course at a local college said that he had revised his course assessments to be performance-based. He also noted:

> The development and use is much more complex than I originally thought.

Many teachers volunteered positive comments about the value to them of working on alternative assessment:

> My attitude toward assessment in general is actually getting better. I used to feel it was my enemy!
>
> It's [alternative assessment] more difficult but more fun and valid. It's becoming easier.
>
> I have begun to look at teaching from a different vantage point. I can see more possibilities.
>
> I feel like I really get to know each child.
>
> Using math journals has given me insight into who students think their work is for.
>
> I am more accepting of [curriculum] frameworks; I've needed to use them frequently.
>
> I believe strongly in teacher judgment and creativity. I think many teachers (myself included) have played around with this for years and are now finding some validation for our beliefs.
>
> I focus more on what's important and meaningful for students. Now I feel enthused about the groundswell of support. It's critical, and all of us pioneers need to blaze the trail together.

Such comments reveal important areas of impact on teachers' beliefs and practices, such as increased acceptance of innovative curriculum frameworks, a sharper focus on meaningful learning goals, and improved insight into student learning.

Teachers' expectations for students. Over half the respondents said working on alternative assessment had changed their attitude toward students in general and their expectations for student learning and performance, as shown in Figure 2. One teacher mentioned that he now expects somewhat more speaking on the part of children in his math class, and another said she "began looking more for student explanations in their math journals as opposed to getting the answers." Both these teachers were influenced by workshop discussion on the value of having students learn and demonstrate their knowledge in a variety of modes. Another teacher said her expectations for student learning and performance became higher and went on to say:

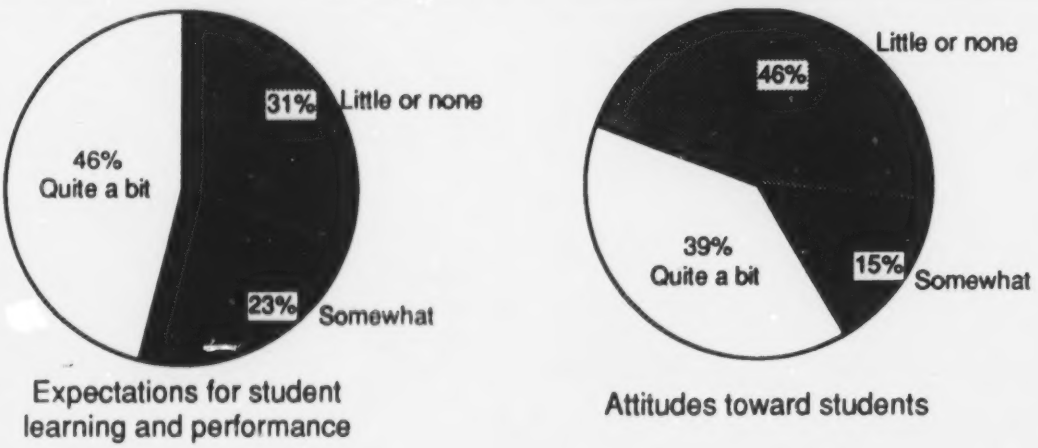

Figure 2. Impact of working on alternative assessment on teachers' attitudes and expectations for students.

> It has made me think of *why* I have children do certain tasks and I question if they are truly learning activities that are valid. Kids need to learn thinking skills first. I'd like to see assessment more narrative rather than grades.

Another teacher said that working on portfolio assessment had reminded her that children's performance "is not black or white," and she noted that her elementary grade level is now in the process of revising their report card to reflect growth and development of students.

Changes in curriculum and instruction. Most respondents (85%) also felt the alternative assessments they had tried had moderate to strong positive effects on school goals (mean rating was 4.1 on a 1-5 scale). One administrator noted that he was gratified to see more schools in his county focusing on the "right stuff."

When asked what changes (if any) to curriculum and instruction seem called for by alternative assessment, educators responded with fundamental principles of instruction and assessment:

> We need to change our curriculum and instruction by determining what students should learn and be accountable for, then devise the curriculum to match these goals. Assessment has to be *pre*-determined.

> An overall picture of where we were going and what needed to be taught had to be kept in mind and instruction had to be integrated, i.e. math and science and language arts.
>
> Children were told more ahead of time what was expected of them, what were they expected to be able to do in order to succeed.
>
> Greater emphasis on cooperative learning and process, also focus on metacognition for students' own understanding.
>
> Aligning both the curriculum/instruction and assessments toward the same goals is paramount. Also aligning them to the same beliefs about learning.

Teachers who used portfolios agreed that the technique helped them reflect on their own teaching and set goals for the following year. These comments were typical:

> I discovered I need to organize my assignments much better. I have no problem in getting students to write frequently and for many different purposes, but I have not found the key words to get them to revise their work.
>
> It provided an excellent opportunity for self reflection in regards to staying on task and in touch with the theme and interdisciplinary teaching.
>
> The portfolios seem to mirror not only the student's work but the teacher's as well. As a result, I have found the need to re-work, re-organize, and re-assess my teaching strategies for even greater effectiveness in the classroom each day.
>
> [Next year] I'd get parents involved more than just looking at the portfolios; they'd respond to them.

One administrator commented that her math teachers seemed locked into thinking that they have to grade every paper and are reluctant to give up the "power" inherent in this view or to increase their own workload by grading more written work. One of the teachers who used portfolios seemed to share the same viewpoint but began to seek a new way by the end of the year:

> The portfolios revealed to me that I must be more organized with my teaching, specifically regarding the paperwork. Follow through is very important, it seems, for motivating students to higher standards ... The more [work] we give, the more assessment [we have to do] ... I need to work this out so I will not burn out. Peer evaluation of papers proves to be a must next year.

Collegiality. A majority of the survey respondents felt that the alternative assessments they tried had had a moderate to strong positive effect on teachers' collegiality and professionalism (means of 3.8 and 4.1). However, fewer than half the respondents reported that working on alternative assessments had affected their own interactions with or attitudes toward colleagues (see Figure 3). Teachers in the innovative elementary school already share rich and frequent dialogues, hence they said there was no improvement. Teachers and administrators in more typical school settings, however, noted that they had increased their discussions of goals and methods

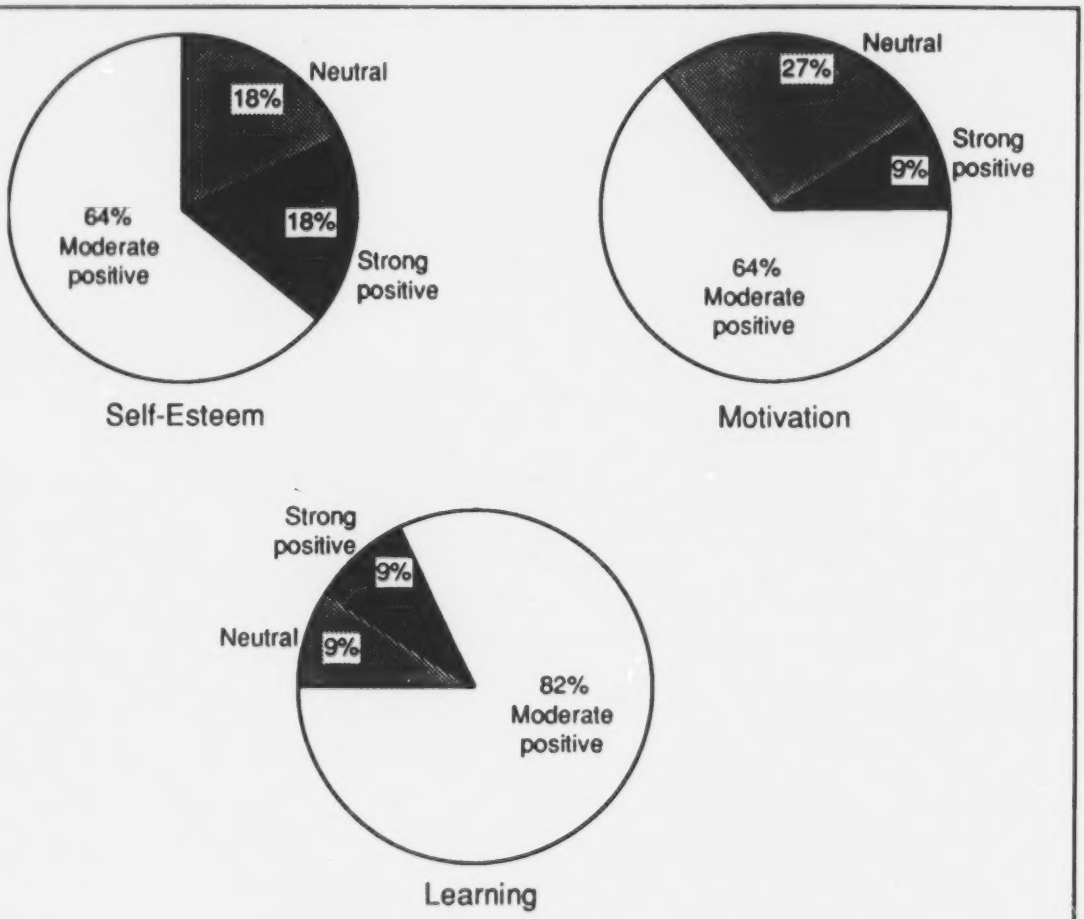

Figure 3. Impact of working on alternative assessment on educators' professionalism, collegiality, and interactions with colleagues. Survey responses to items on 5-point scale: 5 = strong positive; 1 = strong negative.

with colleagues. We noticed in our observations of working groups that the collegial dialogue about assessment was not *always* pleasant or fruitful and that it often reflected frustration with trying to grasp new concepts and resistance to taking on anything that required more work of classroom teachers. Nonetheless, several educators made comments similar to one who said "how enjoyable it was to work with a group of such bright, interested, committed individuals."

Effects on students. Over three-fourths of the survey respondents felt the alternative assessments they tried had at least a moderately positive effect on students' self-esteem (mean of 4.0), motivation (3.8), and learning (4.0) (see Figure 4).

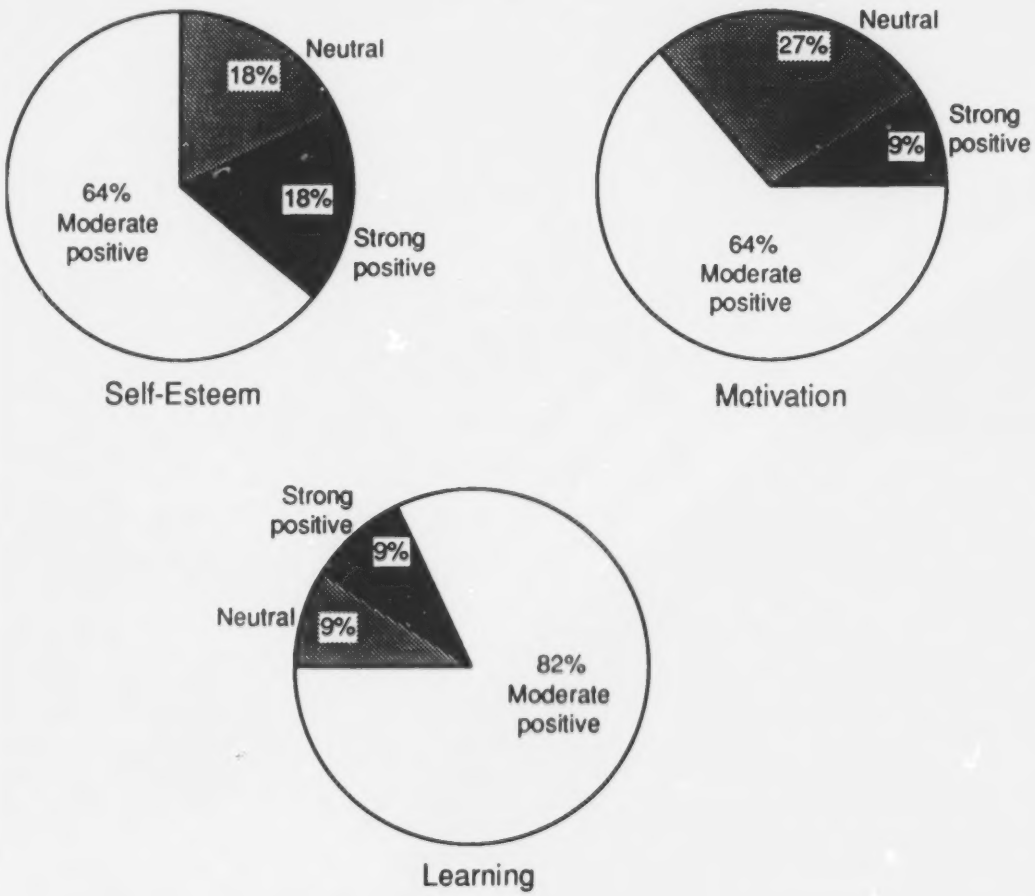

Figure 4. Perceived effects of alternative assessment on students.

Teachers who used math journals in the elementary school noted various effects on students. For example, one said that students wrote about problems they had in math that they had not previously verbalized; hence, journals were very helpful in diagnosing student skills. Another noted that her students (in upper elementary grades) could see the value of reflection on what they were learning. A third said that math journals helped her students understand the concepts better and that "somehow they explore mathematics differently in writing."

Teachers who used portfolios felt this alternative assessment technique helped both students and teachers see and appreciate the progress that students made in the class:

> I found it an excellent way of assessing what they have done ... It is an excellent way of getting students to keep track of their work and mark their progress ... Self-evaluations on selected pieces get them thinking about their writing style ... They all wanted to keep their portfolios [at the end of the year].
>
> Students were able to view work done throughout the semester and say WOW!
>
> Although the portfolio requires more work, I am convinced it is an effective tool for improvement as well as motivating superior work habits in writing.

Parents. Survey respondents did not see much effect on parents of the alternative assessments they had tried, although one mentioned that parents preferred the standardized measures they themselves had had in school. A resource teacher made a comment suggesting that educators may not have really had a chance to think about this potential area of impact:

> Not at this point yet—we may have missed an important element here.

A teacher who had used math journals with her students said that they were a valuable aid in parent-conferences by showing development and affect all in one place. Another mentioned that journals provided parents with evidence of student resourcefulness. Neither teacher noted how parents responded.

Summary and Conclusions

As a precursor to examining the consequences of performance assessments for students, teachers, and schools, this year's project explored

the barriers and facilitators to the implementation of performance assessments encountered by educators in a variety of school settings. During the past year we identified a diverse set of school contexts and student populations in which to begin our work and collaborated with a number of teachers, schools, and districts, all of whom are trying to implement alternative assessments in math or social studies (e.g., journals, open-ended questions, essays, and portfolios).

Our assistance entailed professional development in alternative assessment, including help with articulating student outcomes, developing assessment tasks and criteria for judging student work, ensuring reliable scoring and valid interpretation of the results. To collect data on the barriers and facilitators to implementation as well as preliminary measures of effects, we relied on a combination of surveys, interviews, and observations during the workshops and meetings in our six study sites.

The key barriers to implementation of alternative assessments that we observed included:

- a focus on learning activities rather than student outcomes;
- difficulties specifying criteria for judging student work;
- assessment anxiety;
- lack of time to learn, plan, practice, use, and reflect;
- need for training and ongoing support;
- reluctance to change;
- lack of a long-range implementation plan.

The factors which appeared to facilitate the implementation of new assessments were:

- purposeful commitment to innovative assessment and instruction;
- being part of a group;
- administrative support;
- sustained technical assistance.

feel inundated with work and feel it is a luxury to spend time thinking about *how* they teach. Many *want* recipes rather than ideas because they don't have (or want to make) the time to think about them. They want innovations "made easy and simple, not elaborate and time-consuming."

As Moon (1992) and Aschbacher (1992) have both noted, the shift to performance assessments requires a deeper level of conceptual involvement and intense reflection not only on the part of students but also of teachers and other educators. Teachers are also being asked to engage with students in new ways (such as monitoring small group work, conferencing with students over portfolios, coaching performances in simulations) and to assume more authority for evaluation than previously, but with little assistance or practice in designing and using new instructional and assessment strategies. In an environment that has typically rewarded swift, tidy work, many teachers, like their own students, require much reassurance that they have permission to take time to ponder and discuss new concepts, participate in a "grungy" process, as one teacher put it, and make mistakes along the way. Even with such reassurance, however, many teachers are reluctant to lower their tenuous comfort zone—by risking the loss of what little control, respect, motivation to learn, and academic success that they are able to command among students in the current school environment.

Underlying most teachers' reluctance to change seems to be a vague feeling that implementing alternative assessments is not just a small undertaking, but a significant and comprehensive reform of schooling. They are right. The call for new assessments to be integrated with instruction implies a dynamic conceptual shift for many teachers and administrators, most of whom do not have strong backgrounds in current theories of learning and instruction, curriculum development, or assessment. Teachers' reluctance to change is also a reflection of the organizational practices in schools that work against teaching and evaluating students' deep conceptual understanding (Moon, 1992). Regardless of whether teachers can articulate their reasons for resisting change, they nonetheless sense the tremendous magnitude of what looms ahead.

The fact that teachers and administrators in our study tended to see preliminary positive effects of alternative assessments on students is promising, not only for the sake of students, but for sustaining educators'

Although the performance assessments used by most sites in this study were quite tentative and exploratory, some positive effects were suggested during surveys, interviews, and examination of student comments in journals and portfolios. For example, we noted that working on alternative assessment led teachers to reflect more on their teaching practices, to consider the alignment of instruction and assessment, to view assessment as something positive that offers insights into how students think, and to see the importance of assessing growth and development. In addition, working on performance assessments led to increased professional dialogue around desired educational goals and methods. Teachers reported that they thought the assessments had some positive effects on students, such as increasing their understanding through multiple modes of expressing knowledge. Educators in our study were still in the preliminary stages of exploring and developing performance assessments and most had not yet considered how using them might affect parental support or involvement.

Our key observations are at once very fundamental and very frustrating. Even quite modest implementation of alternative assessment takes a tremendous amount of time and externally-provided professional development. In addition, the kind of instruction that should support performance assessments is sorely lacking. We have observed a great reluctance on the part of teachers to articulate desired student outcomes and to embrace the development of criteria and standards for assessment. Successful development and use of alternative assessments by teachers, therefore, requires a significant paradigm shift that cannot be sustained with just a few inservice meetings. Even though we were working with professionals who were very interested in new assessment and had begun some work on their own in many cases, we found they needed substantial technical assistance—sometimes more than they realized they needed and often more than we had the time to provide.

Much existing professional development focuses on "recipes" for innovations and fails to provide relevant theoretical underpinning. Hence, for example, when reform efforts exhort teachers to let students "discuss" math, they sometimes shape classroom discussions towards a single correct answer without realizing that this is contrary to the intent of the reform. Unfortunately, most of the practitioners with whom we have worked seem to

efforts throughout a difficult and complex period of change. According to several teachers in this study and several researchers (Bryk, 1988; Stern & Keislar, 1977), teachers are motivated by student performance and engagement and are burned out by not reaching students effectively. If innovations like performance assessment and appropriate, supportive instruction provide strong positive effects for students that educators and the public can readily see, teachers will be more likely to value and embrace such assessment as a lifelong addition to their teaching repertoire, and assessment will have begun to fulfill its promise as a potent tool for school reform.

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APPENDICES

Humanitas Portfolio Project, Teacher Survey

Implementation and Impact of Alternative Assessments

Portfolio Project, Teachers' Debriefing Survey

Examples of Classroom Alternative Assessment Materials

1. Social studies: Class instructional activities as precursors to CRESST content area explanation assessment
2. Humanities portfolios: Table of contents and criteria for judging student work and classroom tasks
3. District level open-ended math assessments
4. Sample elementary school math journal entries

Name_____ School_____ Subject_____ Gr___

Humanitas Portfolio Project
Teacher Survey
Spring 1992

1. What were the main advantages of keeping portfolios?

2. What were the disadvantages or problems?

3. What did the portfolio process reveal to you about the following?

   a) your students

   b) your teaching

   c) assessing students

   d) other

4. Did you grade the <u>overall</u> portfolio? Please explain why/why not:

5. What would you tell another teacher who was considering using portfolios?

6. If you used portfolios again, what would you do differently?

Many thanks for participating in our project this year. We sincerely appreciate your efforts and those of your students!

Implementation and Impact of Alternative Assessments
Spring 1992

For our research at CRESST/UCLA, please help us document some implementation issues and the consequences of using alternative assessments for students, teachers, and schools. Many thanks.

A. Background

1. Your Name:
2. School:
3. District:
4. Position: (teacher, principal, etc.)

5. What training or experience have you had in assessment prior to this year?

B. Nature of alternative assessment(s) you have been working on this year:

1. grade level(s):

2. subject area(s):

3. general areas of student outcomes targeted:

4. results of these alternative assessments would be used primarily by:
[] teachers [] school [] district office [] other

5. Were the results of any alternative assessments communicated to parents in your school/district this year? [ ] Yes [ ] No If yes, how did they respond?

6. How often were these assessments piloted or used this past year?_____

7. To what extent was alternative assessment a priority in your school/district this year?

very hi priority	important	somewhat	slightly	barely interested
5	4	3	2	1

8. Approximately what proportion of your job time did you spend working on alternative assessments this past academic year? (including planning, developing, administering, scoring, etc.) _____

C. Effects of Implementation

1. Some people feel that alternative assessment calls for a new approach to instruction and curriculum as well as assessment. To what extent did you find this to be so? (circle one)

	not at all	very little	somewhat	quite a bit	a great deal
(Instrn)	1	2	3	4	5
(Curric)	1	2	3	4	5

2. Please describe what changes to curriculum and/or instruction seemed called for (if any).

3. Were these changes to curriculum and/or instruction implemented?
[ ]Yes [ ]No What factors helped or hindered you?

4. What help, if any, did you need in making changes in curriculum/instruction?

5. How much support did you receive for changes in curriculum, instruction and/or alternative assessment?

in these areas:	a great deal	quite a bit	some-what	slight	almost none
a. access to materials	5	4	3	2	1
b. technical assistance or training	5	4	3	2	1
c. encouragement from teachers	5	4	3	2	1
d. encouragement from principal	5	4	3	2	1
e. encouragement from district	5	4	3	2	1

6. How and to what extent has working on alternative assessments changed your thinking about the following? Please rate the degree of change (1-5 scale: 1 = not at all, 3 = somewhat, 5 = a great deal) & describe what changed:

Area of change:	Extent of change (circle one)	Describe change that occurred
your teaching or administrative practices	5 4 3 2 1	
your own assessment practices	5 4 3 2 1	
your interactions with colleagues	5 4 3 2 1	
your attitudes toward colleagues	5 4 3 2 1	
your attitudes toward students	5 4 3 2 1	
your expectations for student learning & performance	5 4 3 2 1	
your attitude toward assessment in general	5 4 3 2 1	
your attitude toward alternative assessments	5 4 3 2 1	

7. What new understandings or insights (if any) do you have as a result of thinking about and working on alternative assessments this year? Describe.
(e.g. your strengths/weaknesses as a teacher or administrator, your philosophy of education, the value of assessment, etc.)

8. What effects have you seen as a result of the alternative assessments you have tried?

Effects:	strong positive	moderate positive	balanced or neutral	moderate negative	strong negative
a. students' self esteem	5	4	3	2	1
b. students' motivation	5	4	3	2	1
c. students' learning	5	4	3	2	1
d. teachers' professionalism	5	4	3	2	1
e. teachers' collegiality	5	4	3	2	1
f. school goals	5	4	3	2	1
g. parents' expectations for teachers, the school	5	4	3	2	1
h. parents' expectations for students	5	4	3	2	1
i. parent involvement in school	5	4	3	2	1
j. other important effects you've noted:					

9. Are you interested in participating in further use or development of alternative assessments for your class, school, or district?

very interested	moderately interested	somewhat interested	slightly interested	not interested
5	4	3	2	1

Please explain why or why not.

10. Based on your experience, describe what you think other teachers and administrators would need to develop and use effective alternative assessments, and rate the importance of these (5 = very important, 3 = moderately important, 1 = not very important; circle one)

Needs:	Describe what's needed	Rate importance
a. materials		5 4 3 2 1
b. training in curriculum devel'mt		5 4 3 2 1
c. training in new instructional methods		5 4 3 2 1
d. training in assessment		5 4 3 2 1
e. follow-up, technical assistance		5 4 3 2 1
f. time to plan, develop, administer, score/grade		5 4 3 2 1
g. administrative support		5 4 3 2 1
h. other		5 4 3 2 1

11. What were the important barriers & facilitators to your work on alternative assessment this past year?

a. Barriers:

b. Facilitators:

Name_____ School_____ Subject_____ Gr___

Portfolio Project
Teachers' Debriefing Survey

1. What were the main strengths or advantages to using portfolios?

2. What were the weaknesses or disadvantages? Or, what went wrong?

3. What did the portfolio process reveal to you about:
   a) your students' learning

   b) the teaching/assessment process

   c) yourself

   d) individual students (e.g. something you might otherwise have missed about a particular student)

4. Did you give grades to the portfolio contents ?
Did you grade the <u>overall</u> portfolio?
Please explain why/why not:

5. Would you be interested in using portfolios again next year?

6. If so, what would you change?

Many thanks for participating in our project this year. We sincerely appreciate your efforts and those of your students!

Examples of Classroom Alternative Assessment Materials:

- Social studies: Class instructional activities as precursors to CRESST content area explanation assessment
- Humanities portfolios: Table of contents and criteria for judging student work and classroom tasks
- District level open-ended math assessments
- Sample elementary school math journal entries

Social studies: Class instructional activities as precursors to CRESST content area explanation assessment

UCLA Performance Assessment Study
General Immigration Lessons

TOPIC: ***U.S. Immigration***

OBJECTIVES:

The student will:

1. become aware of personal ethnic heritage;
2. reinforce, supplement and synthesize knowledge about immigration;
3. increase geographic/global awareness;
4. review past and present outlooks on the subject of immigration.

PURPOSE:

The student will review periods of immigration as preparation for a written assessment.

TIME:

For special activity group:

Instruction—two 50 minute class periods
Writing tests—two 50 minute class periods

NOTE:

Each class will be randomly divided into two groups. One group will receive the instruction described below and the other (the control group) will be sent to another location, such as the library, to review either one or more of the following:

- Documents of American history
- Readings of the instructor's choice
- Textbooks and class notes

The control group should not be given instruction or questions other than the statement below.

"The next two days of activities will be spent in preparation for an essay that will assess your understanding of Immigration as part of a UCLA assessment project. I will be grading your essays, and your grade will become part of your course grade.

Where it is not possible to divide a classroom, one whole class will do the special activities and another will serve as the control.

A list of Prior Knowledge Terms and a Suggested Resource List are provided for use with the Special Activities.

DAY ONE

SPECIAL ACTIVITIES FOR THE SPECIAL ACTIVITY GROUP:

Heritage Map Task

Materials:

- Family History Data Sheet
- U.S. and world outline maps for students
- Color coded key provided by teacher using colors available (example: English=red, Chinese=green)
- Map of "Immigration Groups, 1775" copied for each student from Bailey, The American Pageant, 1988 ed., p. 55.
- Overhead/overlay of U.S. and world maps for teacher to use in front of class

Procedures:

1. ***Homework***: (to be completed prior to the start of the special activities)

   Students will be told the day before to fill in as many items as possible on the required family history data sheet. To do this they will consult their parents and/or library resources concerning their ancestors' point of origin and reasons for immigrating to the U.S.

2. ***Individual Activity***: (15 minutes)

   A. Students will:

      1) locate places of family origins on individual world maps and connect these with places of settlement in the U.S. They will do this according to the color coded key;

      2) share this information orally;

      3) record responses of their classmates on their individual maps.

   B. Teacher will:

      1) record individual student responses on overhead/overlay master map;

      2) elicit from class other immigrant groups that have not been included on individual and master maps.

3. ***Group Activity***: (35 minutes)

A. Teacher will:

1) divide the class into groups of 5 or 6 students;

2) ensure that each group reflects the range of ability levels present in the class;

3) assign a group facilitator/spokesperson and a recorder.

B. Each group will:

1) list causes for immigration under the following headings: political, economic and social;

2) post their group responses on the wall. Each group spokesperson will remain with their maps while the other students do a "walk-around" to observe and write comments on the other group maps (refer to #C.2 below). The number of groups visited may need to be limited depending on the number of groups involved (e.g., four groups will take approximately 20 minutes to complete the walk-around.)

C. Students will also:

1) use the following questions (written on board) when observing maps:

a. What concepts may need to be added?

b. Were any factual errors made?

c. How does this map differ from your own group's map?

d. What other changes would you make on this map?

2) write their observations on each group map with their own group's colored marker.

D. Group Response: (20 minutes)

Groups will re-form in their original areas to develop responses to observations.

1) Allow 5 minutes to develop responses.

2) Each spokesperson will have 2-3 minutes to respond orally to written comments on maps.

DAY TWO

SPECIAL ACTIVITIES FOR THE SPECIAL ACTIVITY GROUP:

Activity: *Lazarus' "The New Colossus"*

Materials:

"The New Colossus" text

Procedures:

Group Activity: (approximately 25 minutes)

A. Teacher will:

1) distribute copies of "The New Colossus" to students. Students should read the text silently as the teacher reads it aloud.

B. Teacher will then:

2) lead discussion based on these analytical questions:

a. Is this quote, particularly the last five lines, a sincere reflection of the attitude of the people of the U.S. in the 1880's when the Statue of Liberty was erected on Bedloes Island in New York Harbor?

b. Does it reflect today's attitude?

c. Does this poem merely state an impossible ideal?

Individual Activity: (approximately 25 minutes)

A. In reaction to the poem and discussion, have each student create a new inscription for the Statue of Liberty, a political cartoon, a song, a "rap", or new poem.

TOPIC: IMMIGRATION

IMPORTANT PRIOR KNOWLEDGE TERMS

It is expected that all students will have encountered the following terms before undertaking the special activities.

- acculturation/accommodation
- alien
- Americanization — assimilation, melting pot
- cultural pluralism — salad bowl
- culture
- diversity
- Ellis Island
- ethnicity
- genealogy
- genocide/persecution
- geographic location
- heritage
- immigration/migration/emigration
- indentured servants
- indigenous
- industrialization/labor/sweatshop
- La Raza
- nativism — inclusion/exclusion
- naturalization
- organized crime/mafia
- potato famine
- religion
- slave
- values
- Waves of immigration:
  - old immigration — c. 1600-1840
  - involuntary immigration — c. 1619-1808 (slavery)
  - transitional immigration — c. 1840-1880 (Irish and German Catholics)
  - new immigration — c. 1890-1920
  - quota system — c. 1920-1965
  - post WWII:
    - Amnesty, 1986
    - Asia
    - Immigration and Nationality Act of 1965
    - Mexico-Central/South America
    - Puerto Ricans
    - refugees — various

SUGGESTED RESOURCE LIST:

BACKGROUND FOR TEACHER AND STUDENTS TO USE PRIOR TO AND DURING THE SPECIAL ACTIVITIES

College Entrance Examination Board, Advanced Placement Examination, American History – Section II, Part A, 1973: Document-Based Question on immigration. These brief excerpts from primary sources can be used either to teach background or to stimulate responses for DAY TWO activities.

Additional Reading:

Glazer, N., & Moynihan, D. P. (1963). Beyond the Melting Pot. Cambridge, MA: M.I.T. Press.

Handlin, O. (1951). The Uprooted. NY: Grosset and Dunlop.

Kuzirian, E., & Madaras, L. (1987). Taking Sides (2nd Ed.), Vol. II. Issue 5: Was the Immigrant's Old World Culture Destroyed as They Adjusted to American Life? Guilford, CT: Dushkin Publishing Group.

Lerner, M. (1965). America As a Civilization. Vol. One. "Is There an American Stock?" and "The Immigrant Experience," pp. 77-94. NY: Simon and Schuster.

PRIMARY SOURCES FOR RESEARCHING THE FAMILY HISTORY

1. Materials in the possession of the family: picture albums, family letters, home ownership papers, family business records, marriage and birth certificates, diaries, autobiographies, and family heirlooms.

2. Vital records - birth, marriage, and death records are found in local churches, town halls, and court houses. They are indexed alphabetically in most places. Entry passes of immigrants to the United States are deposited in the records of the U. S. Immigration and Naturalization Service in the National Archives.

3. Geneologies and Local Histories (country or town) are generally available in local historical societies or libraries. They are especially important for Native American families.

4. The U. S. Federal Census Manuscript Schedules are available for the period 1850-1880 for most states. For the period following 1890, state censuses are available in certain states (i.e., New York and Rhode Island).

5. City Directories can be used to trace individuals, their residences, and occupations, from about 1830 on.

6. Artifacts - Surviving family homes, where accessible; furniture, clothes, and family heirlooms can often be more revealing than written accounts.

PLEASE ASK MORE QUESTIONS THAN THOSE STATED ABOVE. THIS OUTLINE IS ONLY TO HELP YOU GET STARTED.

BE ORIGINAL! THIS IS *YOUR* FAMILY HISTORY REPORT, MAKE IT INTERESTING.

FAMILY HISTORY

Name: _____ Date: _____

Trace your family roots back to a time prior to immigration to the United States. Using a separate sheet of paper, diagram your family tree using yourself as the base, your parents as the next level of the tree, and so on, until you have developed the tree back to the first generation of your family to become Americans.

1. When did your ancestors immigrate to the United States?

   _____

2. From which country or countries did they immigrate?

   _____

3. In which states or territories did they first settle?

   _____

4. Why did your ancestors immigrate?

   _____

   _____

   _____

5. Do you believe they found the United States to be the country they expected it to be after their immigration? How do you know?

   _____

   _____

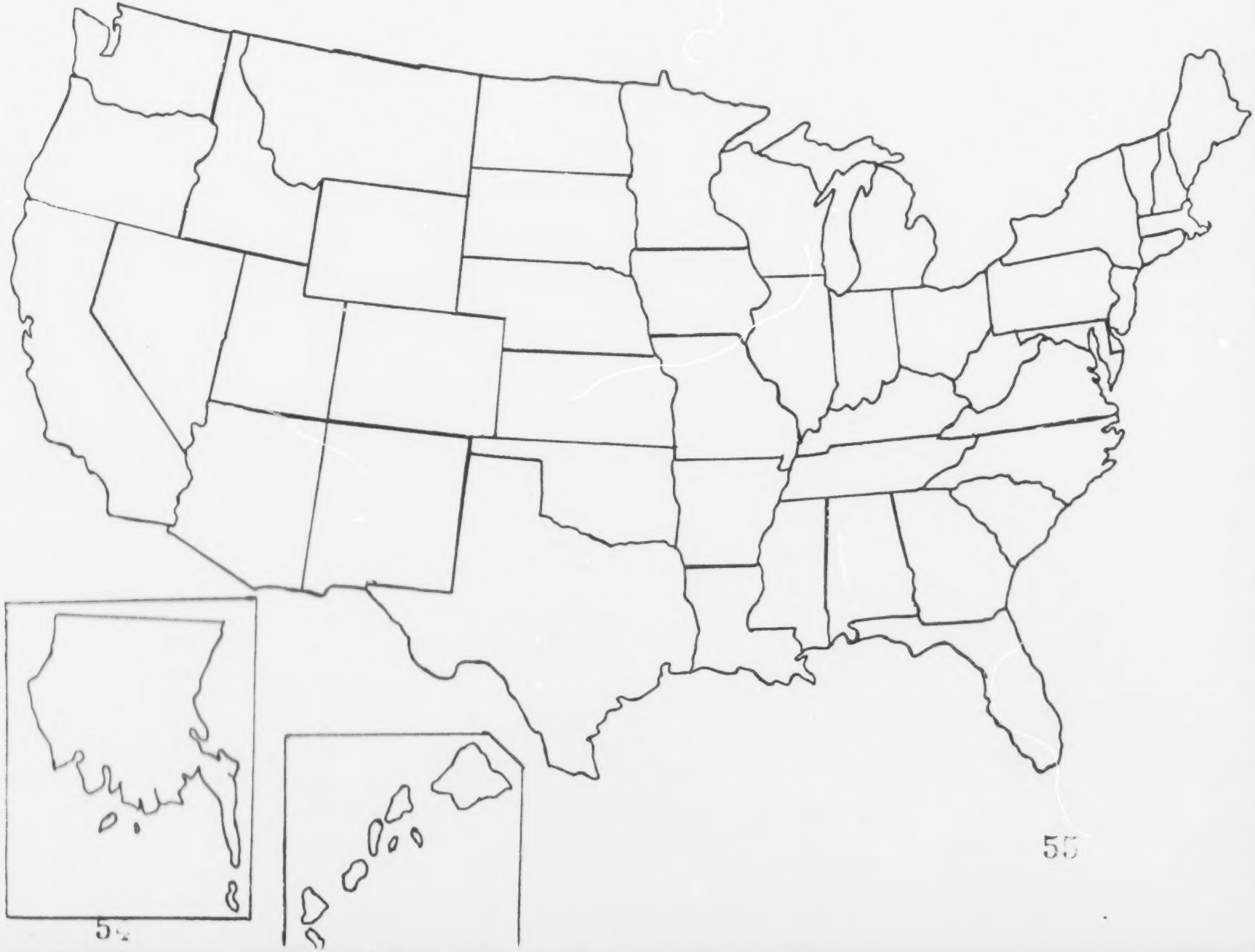
   _____

6 Please list any other information from your family history you feel should be included.

   _____

   _____

   _____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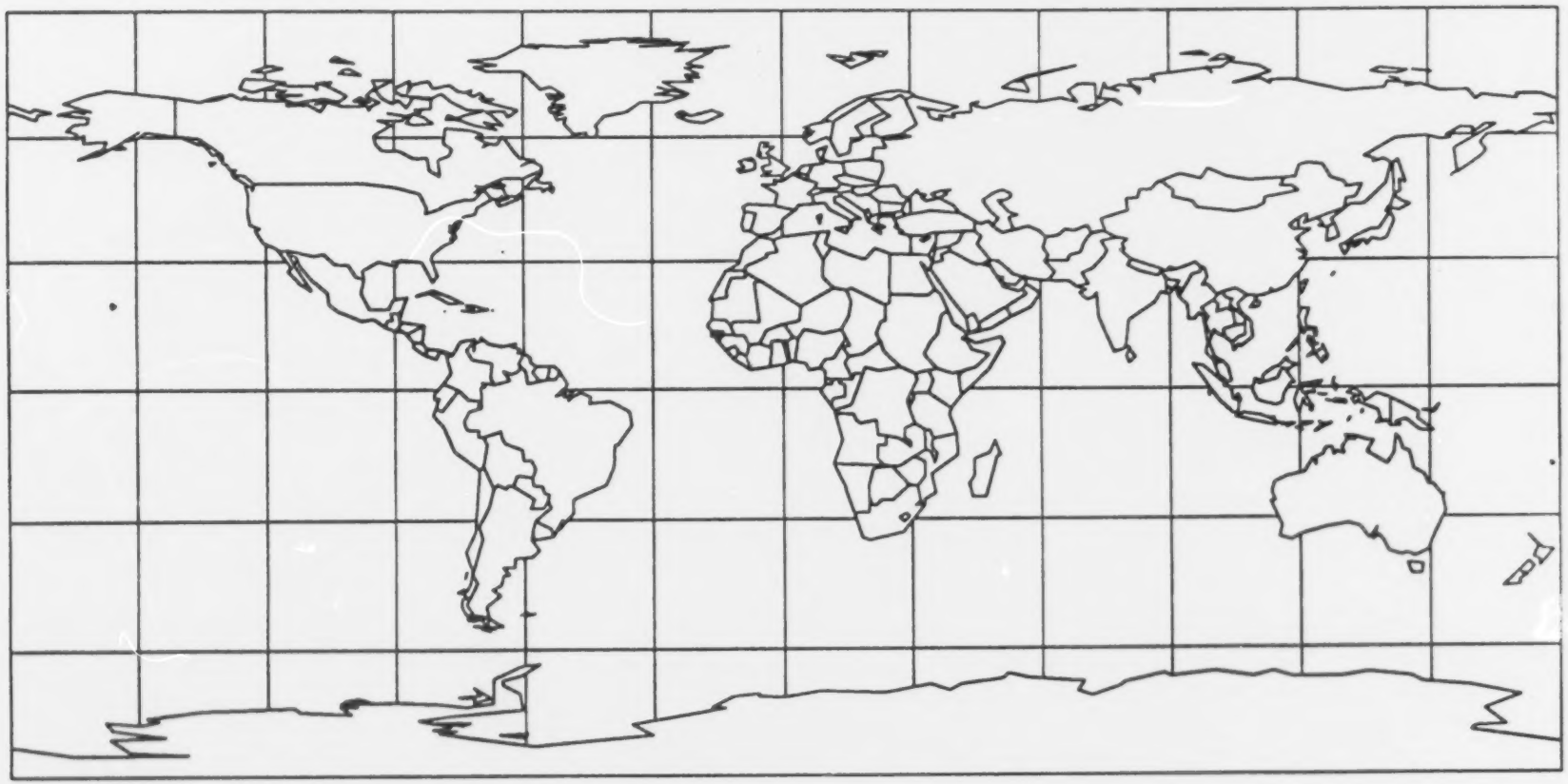


The New Colossus

By Emma Lazarus

Not like the brazen giant of Greek fame,
with conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose fiame
Is the imprisoned lightning, and her name
Mother of Exiles, from her beacon-hand
Glows world-wide welcome; her mild eyes command
The air-bridged harbor that twin-cities frame.
"Keep ancient lands, your storied pomp!"
Cries she with silent lips.
"Give me your tired, your poor,
Your huddled masses yearning to be free.
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tossed to me.
I lift my lamp beside the golden door!"

Humanities portfolios: Table of contents and criteria for judging student work and classroom tasks

Potential Portfolio Contents

For purposes of evaluation, each portfolio needs to contain a core set of pieces as follows:

- Table of contents
- 2 end-of-unit exams (1 from early this semester and 1 from the end of the year)
- 1 "best piece" of work selected by the student with (a) brief written rationale for selection and (b) early drafts with feedback from peers and/or teacher if available, (NOTE: avoid letting students rely on "good grade" from teacher as criteria; help them discover & articulate own standards)
- 1 documentation of a special project, preferably interdisciplinary -- (can be group project, but needs individual documentation of it of some kind)
- 1 piece of work that relates to a field trip (if taken)
- 2 student self-evaluations (reflections on work) -- early March & end of yr
- 1 open-ended student reflection on the Humanitas program (end of yr)

For your own classroom or team purposes, the portfolios may contain whatever else you would like to include, such as additional student work or self-evaluations, parental responses, teacher comments, peer reviews, and so forth.

Please note: All pieces of work should be **dated** and have a copy of the **assignment directions attached**.

Rater:
Teacher: School:
Courses: Grade:

c U.C. Regents, 1992

Rating Student Work

(write student's name above column)

1=minimal; 4=excellent /deep/full	S1	S2	S3	S4	S5	S6	S7	S8
Personal investment in work								
Interdisciplinary links								
Complex thinking skills								
Self Evaluation, reflection								
Growth over time								
Teacher's rating: lo, med, hi achmt								

Rater:
Teacher: School:
Hum. Courses: Grade:

Portfolio Rating
Humanitas Evaluation 1991-92

TASKS:

Instructional/Task Opportunities:
(1=almost none; 4=excellent opport'y)

Interdisciplinary links								
HOTS: analysis, synthesis, organization, persuasion, prediction, evaluation, (not recall)								
Link lrng to real world/community: audience beyond school; link school to community service or field trip, personal experience/stake								
Self evaluation, reflection								
Group work								
non-written work, e.g. oral, art, etc								
Tchr fdbk positive, substantive, amt								

Name Eberardo Sotelo

Portfolio Assessment

The purpose of this assessment is for you to review all you have written this semester (major assignments mainly), and realize the progress you have made . . . all you learned . . . and what you are capable of.

Please answer the following questions thoughtfully.

1. Sift through your writing folder. Don't just look at grades. Look at the words you have written. Write down several sentences which describe your initial reaction to this compilation of your writing.
well in my first essay I dont think I wrote it well with a good Ideas and I miss spell alot of words. for ex. shoe, shelter, Experience. and also my grade wasn't that good a C! come on I at Least wrote four papers. including extra credit question.

2. Now--find and read the very first essay you wrote this year. What do you think?
I think it could of been better and less words mis spell. also the quality could of been better. but what you expect. with practice you become a better writer and that's what happen with me. I'm a little better not Lot but I'm getting there.

3. O. K.—find and read your most recent essay. What change do you notice between the two? Do you see improvement? Explain. I do alot in the wasteland it was really not that good but the Glamourous I really think that I wrote better with more meaning and the and the Ideas were great. and I also have less mistakes on the paper better organize.

4. Pick out the paper on which you feel you performed the best. Reread it and write here what you did well. I think one of the good papers was the Glamourous and this final exam. I kind of try to make them good. with more feelings and exciting Ideas. The Glamourous had less mistakes and also alot of reality with Glamourous and my final. was a poem where I just wrote what I see and hear. all over south central L.A. Since I Live there.

District level open-ended math assessments

MEMORANDUM

DRAFT

DATE: March 12, 1992
TO: Intermediate Mathematics Teachers
FROM: Math Performance Task Force Committee Member
MAILED BY: Research and Assessment
SUBJECT: Open-Ended Mathematics Questions

Howdy,

Enclosed are four sample open-ended mathematics questions. These questions are designed to give you and your students practice with the open-ended mathematics question format and the scoring of these questions. The district will be piloting an open-ended math question in the 7th grade classes later this spring. Our goal is for this to be an enjoyable and rewarding experience for all of you!

Scoring these should not be a burden to you as a teacher. We have found that the best way is to have the students score each others'. This can be done with students working in groups of three or four and not grading their own papers.

To administer the test, give each student a copy of the page containing the prompt. Instead of using their names on the papers, have them use some identification code, such as, the last four digits of their telephone number. Then allow them as much time as they need to finish the question. Some will finish quickly, others will take much longer. They should receive no help from you other than what is stated in the prompt. This is to be done as an individual task and not a small group task. Collect the papers as they finish.

We suggest that you make overheads of the rubric and three or four student papers that represent a score of 1 or 2, 3 or 4, and a 5 or 6. After discussing the rubric in class, discuss with your students why each example paper received the score it did. Encourage their involvement, either in agreeing or disagreeing. The discussions will be of great insight to you as well as to your students and will improve their abilities to answer this type of question thoroughly.

Students should have individual copies of the rubric to look at as they score the papers. Give each group 3-4 papers to score. Each student can write the score he/she gives each paper on the back of the paper so as not to influence others before they read the paper.

When students are finished scoring, each paper should have 3-4 scores on it. There should be no more than one number difference in the scoring span. For example, scores of three's and four's would be acceptable and scores of three and five or two and four would not.

We feel that you and your students will find this process to be very rewarding. Once again, the discussions you lead with your students will really be enlightening.

We need your feedback. Please keep me informed about the use of these practice questions.

Enjoy!

JB:nl #36B
Enclosures

cc

UNIFIED SCHOOL DISTRICT
INSTRUCTIONAL SERVICES DIVISION
RESEARCH AND ASSESSMENT DEPARTMENT

Name _____ Grade/Course _____

Teacher _____ School _____

Calendar Patterns

Look at this calendar. Tell about the number patterns you see.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Strand: Patterns & Functions, Number, Algebra

#36B
2/6/92

MTF #9

UNIFIED SCHOOL DISTRICT
INSTRUCTIONAL SERVICES DIVISION
RESEARCH AND ASSESSMENT DEPARTMENT

OPEN-ENDED MATHEMATICS

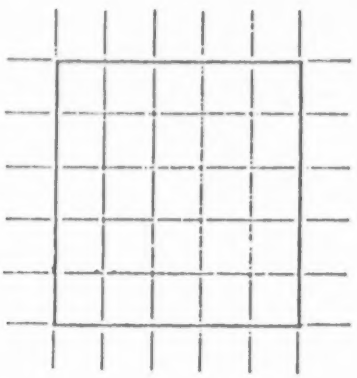
NAME _____ GRADE/COURSE _____

TEACHER _____ SCHOOL _____

DIRECTIONS: Use this sheet to answer the question(s). Show as much of your work as possible. (In some cases there may be more than one answer.) Use the back of this sheet if needed.

CUTTING A SQUARE

Sketch a smaller square inside the given square, so that the smaller square is half the area of the larger square. Write an explanation to convince another person that your new smaller square is truly half the area of the original square.



Student responses should be scored holistically. That is, the sense of the response is the over-riding concern. The following assignment of points is a guide but could be over-ruled if the sense of the response warrants.

Scoring Rubric for : Cutting A Square

Students are given a square with an area of 25 square units and asked to sketch an interior square with half the area of the original. They must write a convincing explanation of their solution. To demonstrate competency, students cannot make any error in proportional reasoning, e.g. halving the side length does not result in halving the area. To receive the highest score there can be no errors (arithmetic or geometric) and a clear, well-written explanation accompanies the mathematical justification.

For 6 points: The response meets and exceeds the criteria for 5 points. For example, an exemplary explanation or an unusual approach is supported by evidence and a full explanation.

For 5 points: There is a complete solution including a correct sketch, area, and side length (given in radical form or as a decimal approximation), and a clear explanation and logical justification.

For 4 points: There is a correct sketch and computation of area and/or side length accompanied by a reasonable and clear explanation or logical justification which might include a numeric or symbolic derivation. Some minor flaws or computational errors are possible.*

For 3 points: There is some discussion of the problem including correct area or an adequate sketch of the solution. There may be serious flaws in calculation of side length or composite area when that approach is used. A convincing explanation demonstrating a solution to the problem compensates for the flaw.

For 2 points: There is some correct beginning such as a reasonable sketch or area computation. However, the student fails to give a complete solution to the problem. For example, the student may ignore the word "square" or misuse proportional reasoning to show a side length of 2.5, but offers no supporting evidence.

For 1 point: The response is an inadequate or inappropriate beginning to the problem.

* Remark To receive a score of 4 or higher there can be no evidence of an error of proportional reasoning.

CAP 1991

PROBABILITY

OUTCOME:

Students make reasonable predictions about the likelihood of events and draw informed conclusions. Students will:

BENCHMARK:

(3) observe and draw conclusions from **probability** activities and determine what is likely/not likely to happen.
(6) predict outcomes and justify them, perform experiments, record results, and determine probabiliti[illegible] from simple experiments.
(8) model situations by devising and carrying out experiments or simulations to determine probability using appropriate sample size.
(10) distinguish between **theoretical** and **empirical probability.** distinguish between **dependent** and **independent events.** predict based on results of sampling.

FURTHER EXPLANATION:

It is important that children explore situations and play games that involve chance. They learn early to make personal decisions using a limited understanding of chance. For example, they may decide to go to the grocery store with mom or dad based on the frequency of past shopping trips that resulted in the purchase of a toy. As students move through the grades, they will develop a greater understanding that life's events often fall into patterns that can be analyzed and used to draw conclusions to make decisions dealing with uncertainty.

By the end of third grade, students will have had a variety of experiences with probability and should be able to draw somewhat obvious conclusions from simple experimental data. Since this type of reasoning is developmental, predictions will vary in accuracy, but they should be reasonable. (e.g. Given a box with 18 red marbles and 2 blue ones, which color is more likely to be picked?)

By the end of sixth grade, students will be able to predict the outcome of an upcoming experiment and defend that prediction. They will be able to perform simple probability experiments such as dice rolling and coin flipping, and record results in the form of charts, tallies, graphs, written paragraphs, and diagrams. They will then determine probabilities and express results in the form of a fraction, ratio, or percentage.

By the end of eighth grade, students should be able to design an experiment and predict the result for a **large population.**

By the end of tenth grade, students will be able to generate data from an experiment, find the theoretical (mathematical) probability and the empirical (experimental) probability and explain the difference between them. They will be able to determine if a probabilistic situation is based on dependent or independent events.

Sample elementary school math journal entries

Math Journal

II

H. Q.

January 30

Homeworks
Land of 6

What did I do what I findait
what was hard and easy.
How do you feel.

I did land of six by myself
I did the writing and t I
find out that when I get to
six I say NiNge turkey When
I clan up it was hard when
I crice my pratten it was easy
I feel very Happy because
I did realy good on everything.

Today I went with Mrs. H. because I had to learn how to play the regroping game. This is how to play the game frist we get some corn the we take a braed that have ones size and a ten size the we put the corn on the braed. frist we have to pick a number from 1—9 then we put it on the braed then we pick a nother number from 1-9 when we do that we bring it donw to the trird one then we put the corn on the x on the braed if it have ten we take a cup and put the ten corn in the cup then we put the other one on the x. I learn how to dge cord the equation. It was easy doing the game of regropping Nothing was hard. I fee lhapp I don't know way I'm Happy.

Mystery problem

may 29.

$$\begin{array}{r} {}^{1}\not{2}\not{0}{}^{9}\not{1}4 \\ -\quad 56 \\ \hline 148 \end{array}$$

Today I did a problem that was $\begin{array}{r} 204 \\ -\ 56 \\ \hline \end{array}$ this is how I figer out the problem frist I look in the ones column it was 4-6 I couldn't do that so I look in the tens column it didn't have any tens so I look in the hunder column it had two hunder so I borrow 1 hunder and put it on the tens column then I took it away then I put it on fort of the 4 ones so it is now 14-6 it = 8 so I put a 8 under the six in the ones column then I look in the tens column it was a-5 it = 4 so I put a 4 under the 5 in the tens column then I look in the hunders column it has 1-0 it = 1 so I put a one under the [redacted] 2 but under the line in the huders column. I got help by Daniel, Lucy and Christopher. I felt happy because I got help by Daniel, Lucy and Christopher with the problem.